Serial No.: 10/550,676 Group Art Unit: 1625

Amendments to the specification:

 At page 42, replace the paragraph corresponding to the title of Example 16 (lines 18-20) with the following amended paragraph:

<u>Preparation of 6-({2-[4-(6-methoxynaphthyridin-4-yl)piperazin-1-yl]ethylamino}methyl)-4</u>*H*-pyrido[3,2-b][1,4]thiazin-3-one (SB-829797)

• Please **delete** the following text beginning at page 62, line 17 and ending on page 64, line12:

Example 41

<u>Preparation of 7-{[(2-{4 -[6- (methyloxy)-1,5-naphthyridin-4-yl]-1-piperazinyl}ethyl) oxy] methyl}-2,3-dihydro[1,4]dioxino[2,3-c]pyridine</u>

a) 7-(bromomethyl)-2,3-dihydro[1,4]dioxino[2,3-c]pyridine

To a stirred solution of 2,3-dihydro[1,4]dioxino[2,3-c]pyridine-7-carbaldehyde (1.0 g, 6.1 mmole) in EtOH (20 mL) at RT was added NaBH₄ (0.23 g, 6.1 mmole). After 2h, H₂O (2 mL) was added and the reaction solution concentrated in vacuo. The remaining solid was passed through a small pad of silica (CH₂Cl₂/MeOH, 9:1) to give a white solid that was used directly.

To a stirred solution of 2,3-dihydro[1,4]dioxino[2,3-c]pyridin-7-ylmethanol (0.77 g, 4.61 mmole) in CH₂Cl₂ (20 mL) at 0 °C was added PBr₃ (0.52 mL, 5.53 mmole). After 24h, The reaction solution was poured onto 10% aqueous NaHCO₃, extracted with EtOAc, and the organic layer washed with H₂O. The organic layer was dried over Na₂SO₄ and concentrated in vacuo. The remaining solid was passed through a small pad of silica (EtOAc) to give a white solid (0.97 g, 92%) that was used directly. LC-MS (ES) m/e 230 (M⁺).

b) 2-{4-[6-(methyloxy)-1,5-naphthyridin-4-yl]-1-piperazinyl}ethanol

To a stirred solution of 6-(methyloxy)-1,5-naphthyridin-4-yl trifluoromethanesulfonate (5.0 g, 16.2 mmole) in DMF (10 mL) at RT was added 2-(1-piperazinyl)ethanol (2.11 g, 16.2 mmole). After 24h at 100 °C, The reaction solution

Serial No.: 10/550,676 Group Art Unit: 1625

was concentrated in vacuo. The remaining solid was purified on silica (CHCl₃/MeOH containing 5% NH₄OH, 9:1) to give the title compound as an off-white solid (3.82 g, 82%): LC-MS (ES) m/e 289 (M⁺).

c) <u>7-{[(2-{4-[6-(methyloxy)-1,5-naphthyridin-4-yl]-1-piperazinyl}ethyl)oxy]methyl}-2,3-dihydro[1,4]dioxino[2,3-c]pyridine</u>

To a stirred solution of 2-{4-[6-(methyloxy)-1,5-naphthyridin-4-yl]-1-piperazinyl}ethanol (0.97 g, 3.39 mmole) in DMF (10 mL) at 0 °C was added 7-(bromomethyl)-2,3-dihydro[1,4]dioxino[2,3-c]pyridine (0.78 g, 3.39 mmole). After 24h at RT, the reaction solution was concentrated in vacuo. The remaining solid was purified on silica (CHCl₃/MeOH containing 5% NH₄OH, 9:1) to give the title compound as an off-white solid (0.16 g, 11%): ¹H NMR (400 MHz, CDCl₃) 8.55 (m, 1H), 8.19 (d, J = 9.0 Hz, 1H), 8.13 (s, 1H), 7.10 (d, J = 9.0 Hz, 1H), 6.99 (s, 1H), 6.87 (d, J = 5.3 Hz, 1H), 4.58 (s, 2H), 4.35 (m, 8H), 4.04 (s, 3H), 3.76 (m, 4H), 2.88 (m, 2H), 2.80 (m, 2H). LC-MS (ES) m/e 438 (M+H)⁺.

Example 42

<u>Preparation of 6-[({1-[6-(methyloxy)-1,5-naphthyridin-4-yl]-4-piperidinyl}amino)methyl]-2H-pyrido[3,2-b][1,4]thiazin-3(4H)-one</u>

To 6-(methyloxy)-1,5-naphthyridin-4-yl trifluoromethanesulfonate (1.5 g, 4.87 mmol) in dry DMF (5 mL) at 25°C was added 1,1-dimethylethyl 4-piperidinylcarbamate (975 mg, 4.87 mmol). After 12h at 90°C, the reaction was cooled, concentrated and purified via column chromatography (silica, 1-10% MeOH in DCM) affording 1,1-dimethylethyl {1-[6-(methyloxy)-1,5-naphthyridin-4-yl]-4-piperidinyl}carbamate (1.8 g, quant.) as a yellow oil: MS (ES) m/e 359 (M + H)⁺.

To 1,1-dimethylethyl {1-[6-(methyloxy)-1,5-naphthyridin-4-yl]-4-piperidinyl} carbamate (298 mg, 0.833 mmol) in dry DCM (8.0 mL) at 25°C was added a solution of HCl in dioxane (4M, 1.0 mL, 4.17 mmol). After 3h., the solution was concentrated affording the amine salt which was used directly in the reductive amination: MS (ES) m/e $259 \, (M + H)^{+}$.

To the above amine salt in DCM-EtOH (1:1, 8 mL) were added DIPEA (1 mL, 5.83 mmol), Na_2SO_4 (412 mg, 0.412 mmol) and 3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazine-6-carbaldehyde (162 mg, 0.833 mmol). After 12h., $NaBH_4$ (38 mg, 1.0

Serial No.: 10/550,676 Group Art Unit: 1625

mmol) was added and the reaction stirred an additional 2h., was concentrated and partitioned between H_2O/DCM . The organic fractions were combined, dried (Na_2SO_4), concentrated and purified by column chromatography (silica, 10% MeOH in DCM) affording the title compound (362 mg, quant.) as a yellow solid: MS (ES) m/e 437 (M + H)⁺; ¹H NMR (CDCl₃, 400 MHz) δ 8.44-8.46 (bs, 1H), 8.44 (d, J = 5.8 Hz, 1H), 8.20 (d, J = 9.1 Hz, 1H), 7.61 (d, J = 7.8 Hz, 1H), 7.13 (d, J = 9.3 Hz, 1H), 7.01 (d, J = 7.8 Hz, 1H), 6.86 (d, J = 5.8 Hz, 1H), 4.47-4.50 (m, 1H), 4.04 (s, 3H), 3.65-3.68 (m, 1H), 3.45 (s, 2H), 3.08-3.19 (m, 3H), 2.19-2.21 (m, 1H), 1.81-2.11 (m, 6H).

- At page 64, line 14, replace "Example 43" with -- Example 41 --.
- At page 65, replace the 1st paragraph with the following paragraph:

For instance, Examples 1 to [[44]] $\underline{40}$, respectively, as identified in the present application had MIC's ≤ 20 µg/ml versus or when screened against the aforementioned organisms above.

• At page 65, line 5, replace "Example 44" with -- Example 42 --.